

end by longitudinal grooves, wherein the absorbent core is formed from an approximately cylindrical blank having a circumferential surface obtained by winding up a length of tape-shaped nonwoven material, wherein the circumferential surface of the blank is pressed radially inward at a first pressure at an even number of at least six mutually spaced apart longitudinally extending portions about the circumferential surface of the blank, and the longitudinal ribs are compressed radially inward at a second pressure, lower than the first pressure, to provide a soft structure at the distal ends of the longitudinal ribs.

2. (Four times Amended) Tampon according to Claim 1, wherein the [blank comprises a] tape-shaped nonwoven material [consisting] consists of 100% rayon fibre, wherein the tape-shaped nonwoven material is a needled nonwoven tape, the absorbent portion of the tampon has a weight of 2.4 g, and has a specific absorption capacity of 4.8 ml/g at an absorption rate of 1.9 ml/s.

5. (Thrice amended) Tampon according to Claim 2 wherein the diameter of the tampon is between 13 and 15 mm, and the fibre core [having] has a diameter of 4 to 8 mm.

6. (Thrice Amended) A process for producing a tampon comprising the steps of: (i) winding up a length of tape-shaped nonwoven material to form a blank; (ii) radially pressing a circumferential surface of the blank at a first pressure over an even number of mutually spaced apart longitudinally extending portions about the circumferential surface of the blank so as to produce a preform, the even number being at least six, only the longitudinally extending portions of the circumferential surface of the blank being pressed, whereby the preform has a central approximately circular and substantially filled compressed fibre core and a plurality of longitudinal ribs formed between the longitudinally extending pressed portions, each of the longitudinal ribs extending radially outwards from the fibre core and being separated from one another by longitudinal grooves, each of the

longitudinal ribs having a distal end; and (iii) exposing only the longitudinal ribs to a radially applied second pressure, the second pressure being less than the first pressure so as to soften the distal ends of the longitudinal ribs.

10. (Twice amended) Apparatus according to Claim 9, wherein each [of the press cutters] press cutter projects radially inward from the press die end face by an equal distance and is separated from the adjacent press cutter by an equal angular amount ( $\alpha$ ).

11. (Thrice amended) Apparatus according to Claim 10, wherein the end face[s] of each of the press dies has the same shape.

12. (Twice amended) Apparatus according to claim 11, wherein each [of the press cutters] press cutter has a longitudinally extending curved face.

15. (Four times amended) Apparatus according to Claim 14, wherein when the press dies are in the closed position, the distal ends of the press cutters are disposed 2 to 4 mm from the longitudinal axis. [diameter of 20 mm and an exit orifice with a diameter of 13 mm.]

16. (Twice amended) Apparatus according to claim 9, wherein the [conical forming die has an] entry orifice [with] has a diameter of 20 mm and [an] the exit orifice [with] has a diameter of 13 mm.

20. (Thrice Amended) A tampon comprising:  
an approximately cylindrical and substantially filled fibre core formed by pressing an approximately cylindrical fibre blank, obtained by winding up a length of tape-shaped nonwoven material, radially inward at a first pressure over at least six longitudinally extending regions spaced apart around the circumference of the fibre blank to form compressed regions defining the fibre core; and at least six longitudinal ribs

extending from the core, the ribs resulting from portions of the blank disposed between the compressed regions so that the ribs are less compressed and have a coarser fibre structure relative to the core, each of the ribs having a distal end, wherein the ribs are compressed radially inward at a second pressure, less than the first pressure, to provide a softer structure at the distal ends of the ribs relative to the core.

23. (Once amended) A tampon for feminine hygiene, comprising a generally cylindrical absorbent portion having a generally cylindrical and substantially filled compressed fibre core from which longitudinal ribs extend radially outwardly, wherein each of the ribs [having] has a proximal end attached to the fibre core [and], is compressed less than the fiber core, thereby having a coarser capillary structure than the fibre core, and [each of the ribs being] is separated from adjacent ribs at the proximal end by longitudinal grooves.

Please add the following new claims:

-- 24. The tampon of Claim 23, wherein the tape-shaped nonwoven material consists of 100% rayon fibre.

25. The tampon of Claim 23, wherein tape-shaped nonwoven material is a needled nonwoven material.

26. The tampon of Claim 23, wherein each of the longitudinal ribs contacts an adjacent longitudinal rib at a point adjacent its distal end.

27. The tampon of Claim 23, wherein the compressed fiber core has a diameter of 4 to 8 mm. --